

FIG. 1
(Related Art)

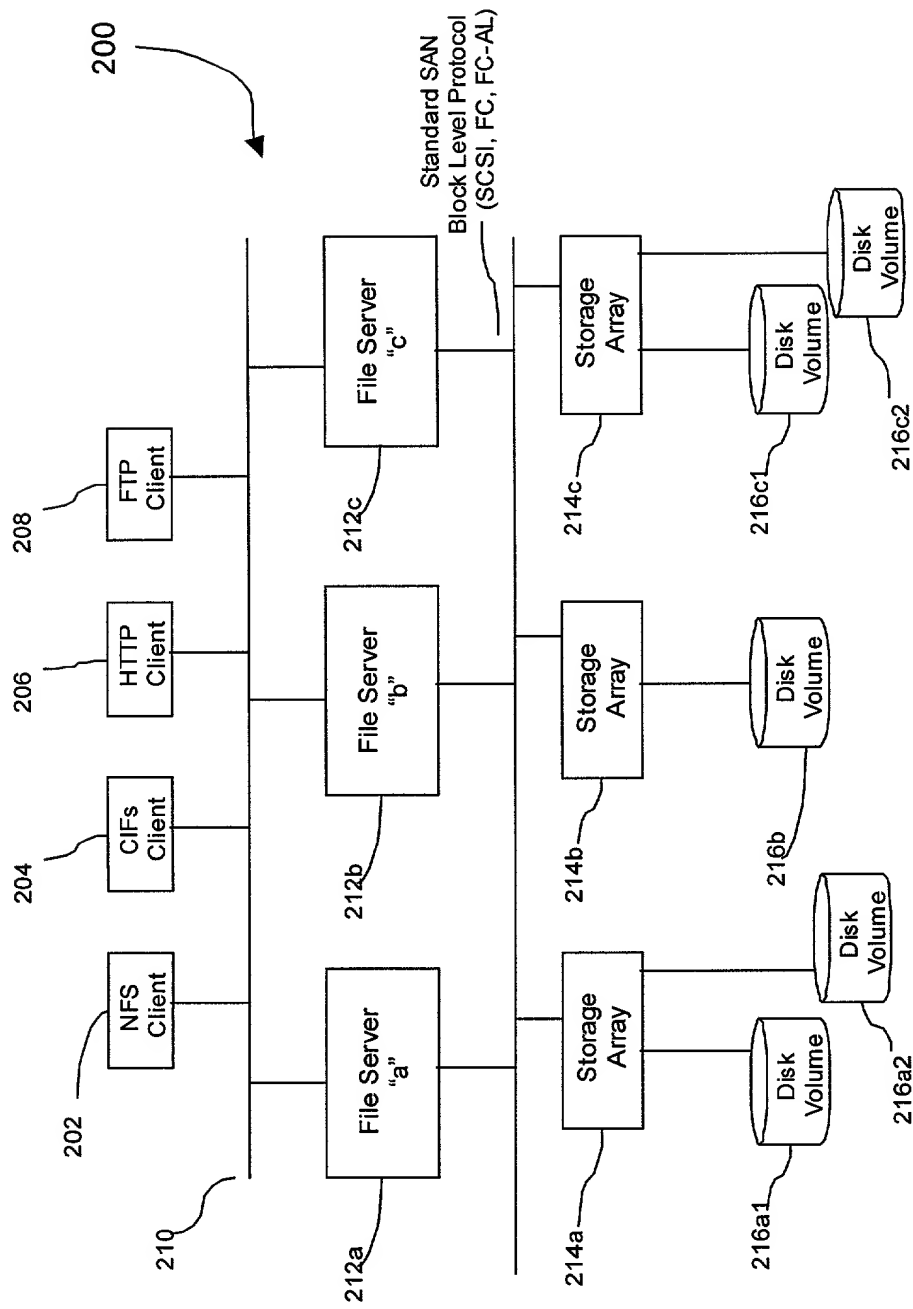


FIG. 2
(Related Art)

FIG. 3 is a block diagram of a system architecture for a distributed storage service.

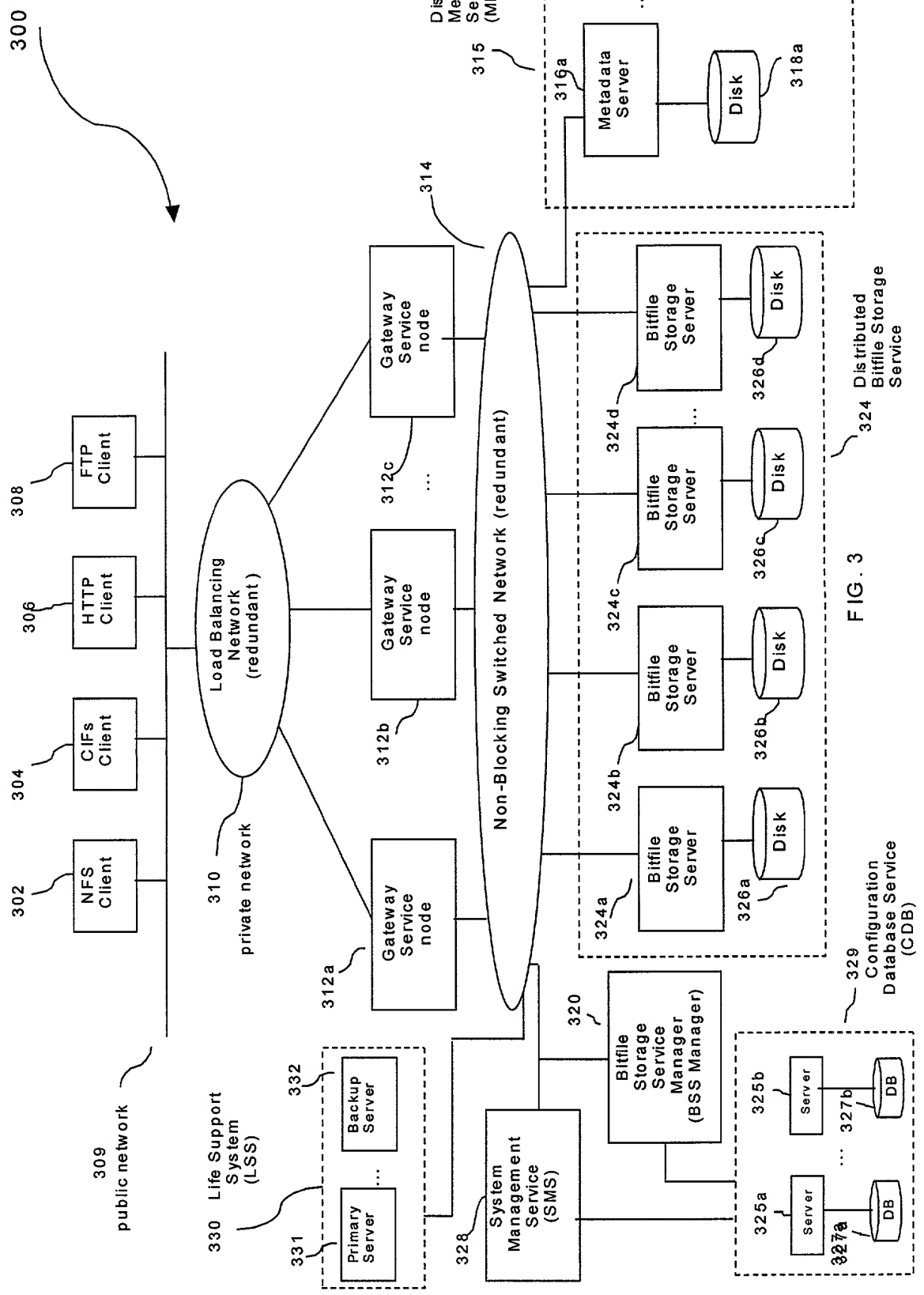


FIG. 3

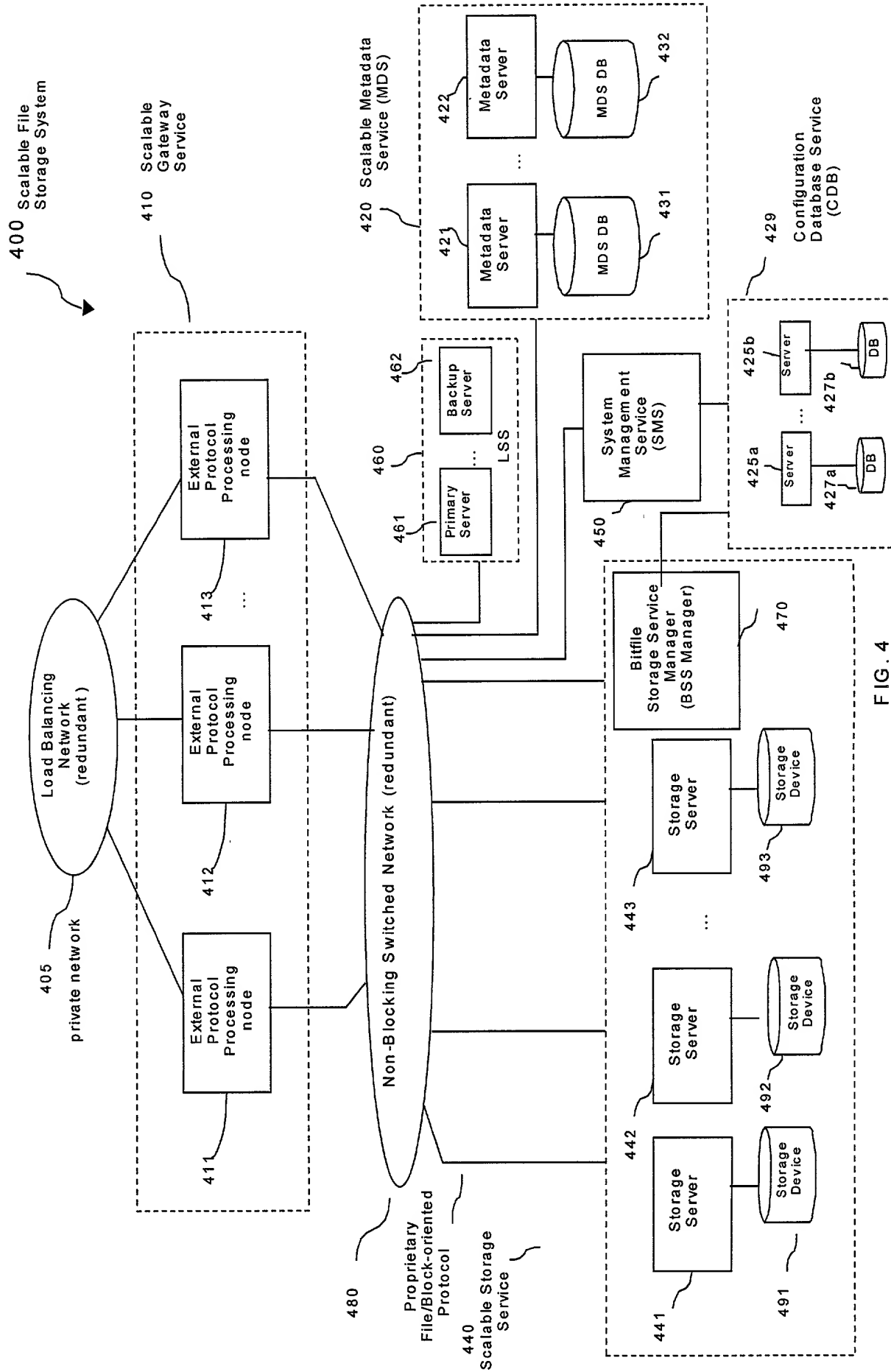


FIG. 4

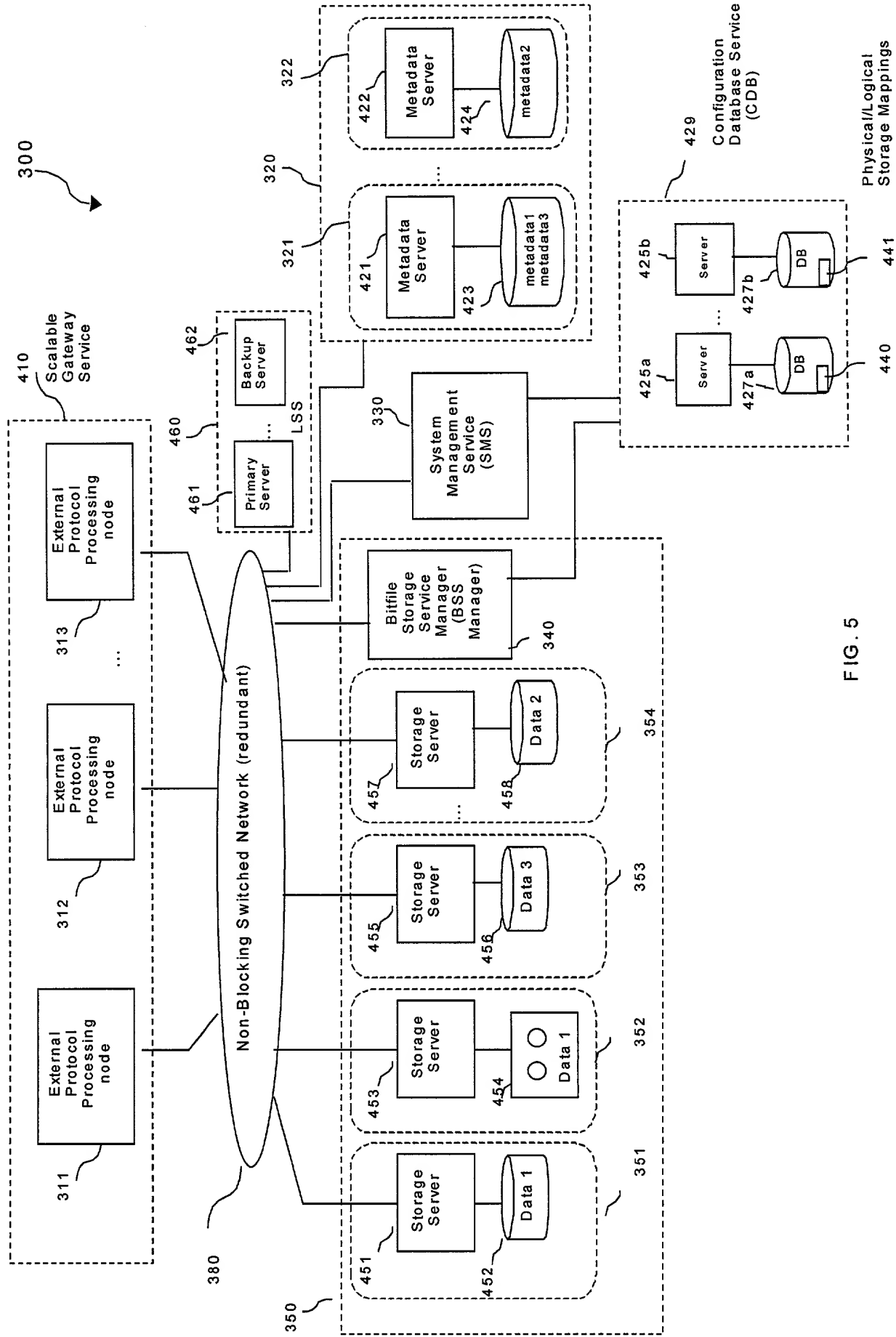


FIG. 5

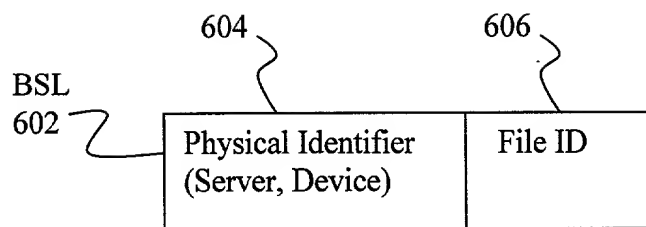


FIG. 6A

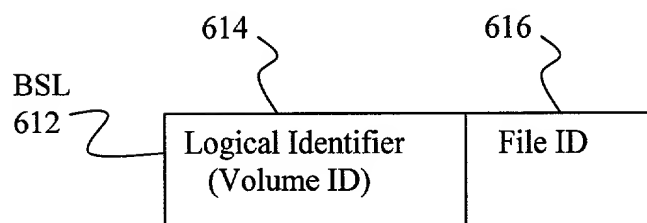


Table 623

Logical Identifier	Physical Identifier
Vol. 1	(Server x, Device x)
Vol. 2	(Server y, Device y)
⋮	⋮

FIG. 6B

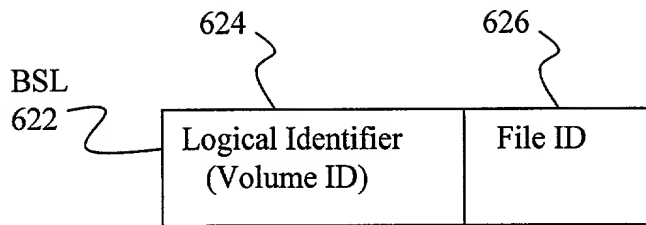


Table 632

Vol. ID	Mirrors
Vol. 0	Vol. 1, Vol. 2
•	•
•	•
•	•
•	•
•	•
•	•

Table 633

Logical Identifier	Physical Identifier
Vol. 1	(Server x, Device x)
Vol. 2	(Server y, Device y)
•	•
•	•
•	•

FIG. 6C

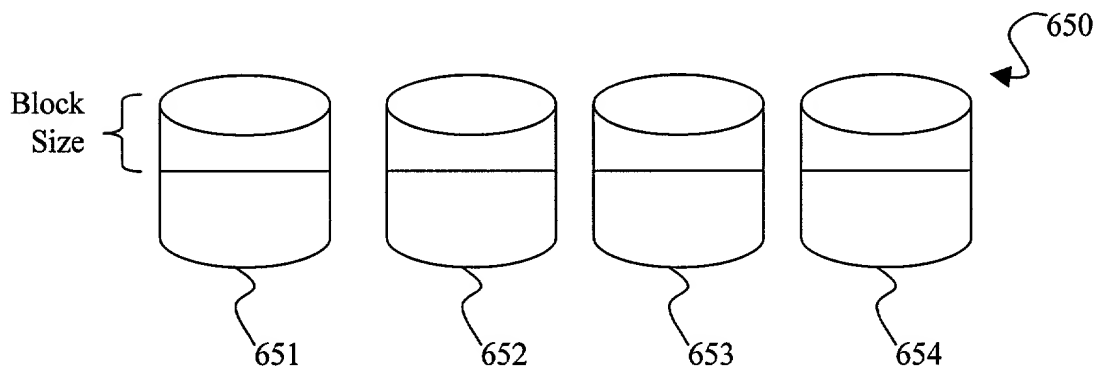
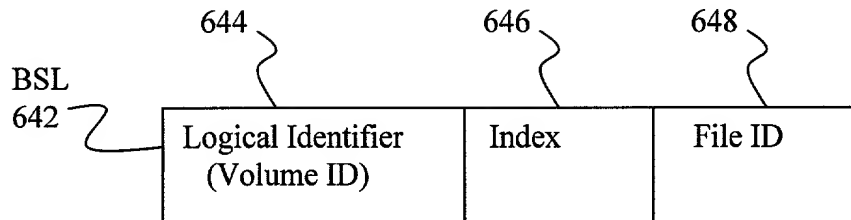


FIG. 6D

FIG. 7 is a block diagram of a storage system architecture. The system includes a Non-Blocking Switched Network (redundant) 680, which is connected to a Flexible Bitfile Storage Service 640. The Flexible Bitfile Storage Service 640 is connected to a Storage Server 641, which is connected to a Storage Device 651. The Storage Server 641 is also connected to a Storage Device 652. The Storage Server 642 is connected to a Storage Device 653. The Storage Server 643 is connected to a Storage Device 654. The Storage Server 644 is connected to a Storage Device 655. The Storage Server 645 is connected to a Storage Device 656. The Storage Server 645 is also connected to a Storage Device 666a and a Storage Device 666b. The Storage Device 666a and the Storage Device 666b are connected to a Storage Device 665. The Non-Blocking Switched Network (redundant) 680 is also connected to a BSS Manager 670. The Non-Blocking Switched Network (redundant) 680 is also connected to a LSS (redundant) 660. The LSS (redundant) 660 is connected to an SMS (redundant) 650. The SMS (redundant) 650 is connected to a BSS Manager 670. The Non-Blocking Switched Network (redundant) 680 is also connected to a group of External Protocol Processing nodes 611, 612, 613, and 614. The group of External Protocol Processing nodes 611, 612, 613, and 614 is connected to a group of MDS Servers 620. The group of MDS Servers 620 is connected to a group of Storage Servers 640. The group of Storage Servers 640 is connected to a group of Storage Devices 650. The group of Storage Devices 650 is connected to a group of Storage Devices 660. The group of Storage Devices 660 is connected to a group of Storage Devices 670.

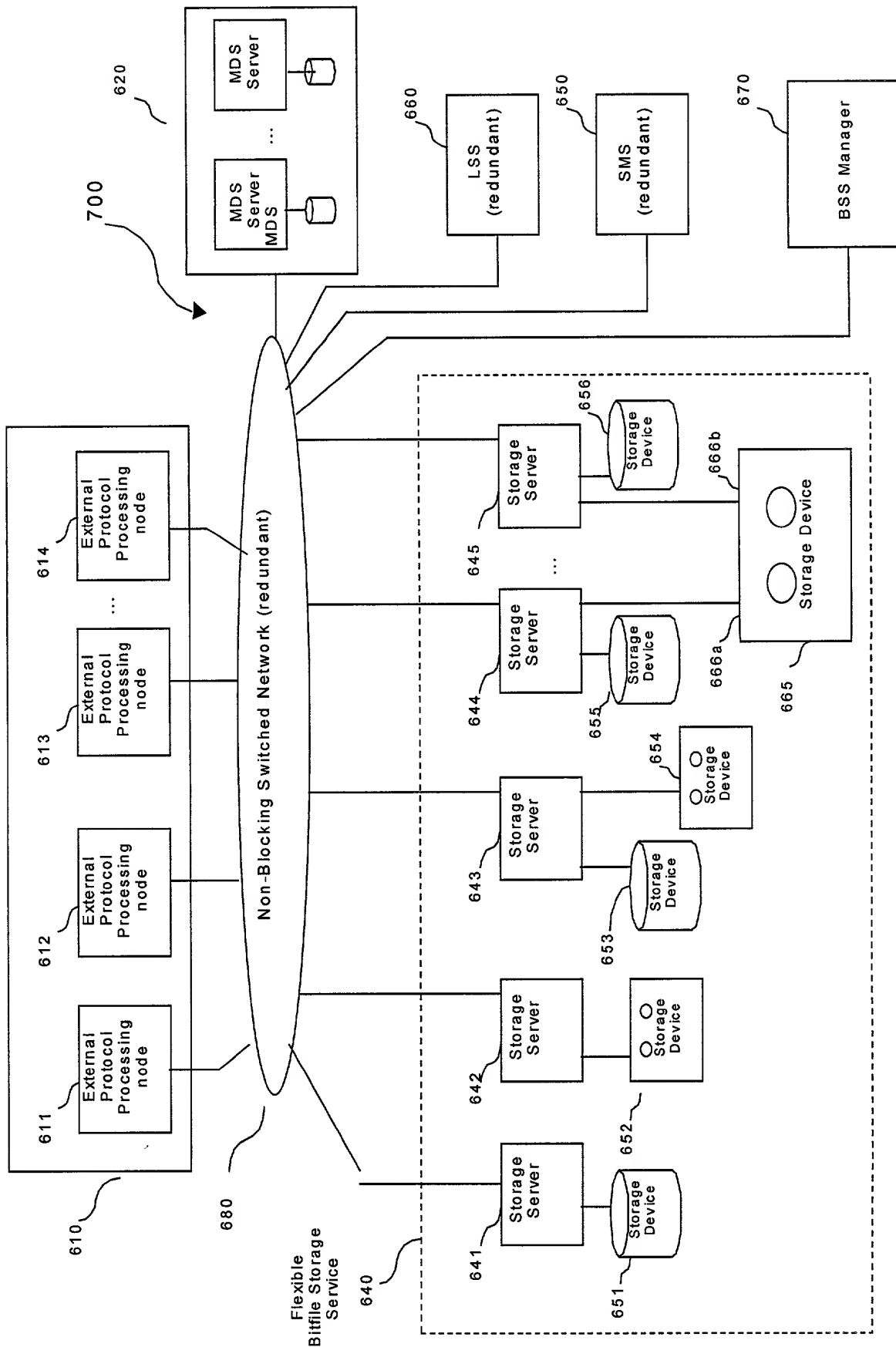


FIG. 7

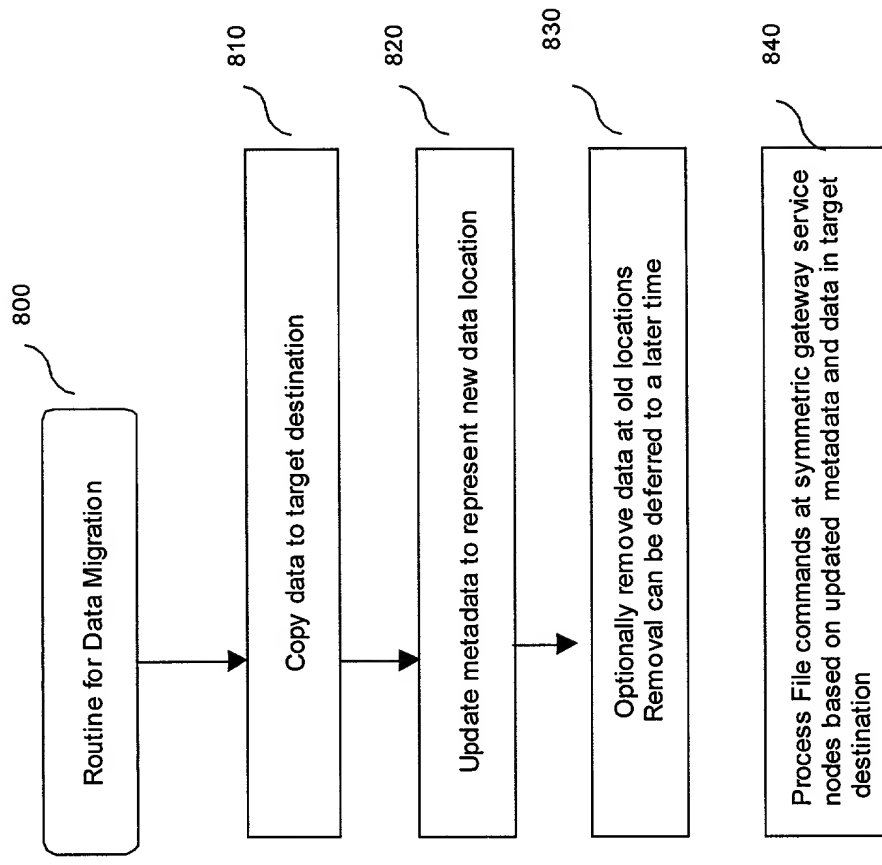


FIG. 8